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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,423	04/09/2004	Thomas H. Walters	702.345	1221

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EXAMINER

NGUYEN, CUONG H

ART UNIT PAPER NUMBER

3661

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/821,423	Applicant(s) WALTERS ET AL.	
	Examiner CUONG H. NGUYEN	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicants' arguments (7/18/2006) have been fully considered but they are not persuasive according to broad pending claims; since 2 devices (a triangulation positioning, and a dead reckoning positioning devices) can be separated as claimed; prior art already taught about each separately (and communications of those electronic devices are known); therefore, putting/integrating them together on a same chassis/platform for complementing each own functionalities is not an inventive concept. The examiner maintains previous rejections.
2. Applicants argue that the prior art does not teach "providing a second mobile device to communicate with the first mobile device and physically separable therefrom, the second mobile device including a dead reckoning functionality that includes an orientation component and a distance component. However, in claim 1 there are only required that 2 devices that can wirelessly communicate to each other (e.g., a communication of 2 stations on earth, or between 2 ships in Atlantic Ocean, etc.). Claim 1 does not require that the second device is a mobile device; and said second device not only require just a dead reckoning functionality (by using an open-ended word "including"). When arguing about a dead reckoning device, and a triangulation positioning functionality device, the applicants argue that they must be physically separable (see pending claims 1, 10, 15, and 23); however, the examiner respectfully submits that the language of pending claims 31, and 37 do not express that idea. Further, making 2 devices integral or not has been a matter of choice because it has long been known that this is NOT an inventive concept to put 2 devices together or separate (In re Larson, 144 USPQ 347 (CCPA 1965) said: "While the brake disc and clamp of Tuttle et al. Comprise several parts, they are secured/attached together as a single unit. The constituent parts are so combined as to constitute a unitary whole. Webster's New International Dictionary (2nd edition) defines "integral" as "(2) composed of constituent parts making a whole; composite; integrated." We are inclined to agree

with the board's construction of the term "integral". Then, too, we are inclined to agree with the position of the solicitor that the use of a one piece construction instead of the structure disclosed in Tuttle et al. would be merely a matter of obvious engineering choice. In re Fridolph, 50 CCPA 745, 89 F.2d 509, 135 USPQ 319.

And In re Lockhart, 90 USPQ 214 (CCPA 1951) said: After a careful examination of the record, we do not find ourselves in agreement with appellant's argument. Although it is true that invention may be present under some circumstances in making integral that which was separate before, we do not feel that such is the case here. Improved results only will not take the case out of the general rule. There is also a requirement that the unification or integration involve more than mere mechanical skill. In re Murray, 19 CCPA 739, 53 F.2d 541, 11 USPQ 155; In re Zabel et al., 38 CCPA 832, 186 F.2d 735, 88 USPQ 367. In this case, all of the essential elements of the appealed claims except integration of parts, are found in the references. It appears to us that the unity or diversity of parts would depend more upon the choice of the manufacturer, and the convenience and availability of the machines and tools necessary to construct the syringe, than on any inventive concept. The claim involves no invention to cast in one piece an article which has formerly been cast in two pieces and put/attach together.

3. This Office Action in a non-final action because the applicants argue that claim 11 was not formally addressed; therefore, the applicants understand it has been allowed. The examiner submits that the claimed subject matter of claim 11 is not allowable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 7-8, 10, 12, 17-22, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 1, 10, 17-22, and 37-40, 10; Turetzky teaches:

- providing a handheld navigation device, a navigation device and an integral display (column 4, lines 59-67);
- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning component including a compass (see Turetzky et al., col. 4, lines 59-64, and col.3, lines 25-27);
- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted ((see Turetzky et al., col.3, lines 3842).

Turetzky does mention the use of an odometer.

Turetzky does not mention the use of triangulation.

However, Hakala et al. use that function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicant's disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines 18-22). Further it is obvious that the PDA used by the prior art has a display device.

Turetzky et al. do not expressly disclose that the second device communicating to the first device, said 2nd device is separate from the first device.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al and Hakala et al in order to provide a claimed method with using both

a dead reckoning device, and a triangulation positioning device to get a location of those devices since a user can make a selection of obtained results.

B. As per claims 2 and 7, Turetzky teaches about providing a handheld “multifunction” device selected from a PDA device and a cell phone (see Turetzky et al., col. 4, line 59-67).

C. As per claim 8, it has been a well-known feature that a navigation system displaying a position of a device, which has an antenna receiver.

D. As per claim 12, it would have been obvious to one of ordinary skill in the art that any related data are from a vehicle that uses a navigation system.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 3 and 4, Turetzky does not teach the PDA having an integrated compass.

However, Hakala teaches it in column 11, lines 21-23.

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al and Hakala et al in order to provide a portable map viewing capable of indicating the current location having directions of a user.

B. As per claim 5, neither, Turetzky nor Hakala teaches the portable device including a rate gyro.

However, Hakala teaches the integrated compass that performs the claimed functions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to substitute any means for another means (i.e., an integrated compass) in order to reduce costs, and may improve functionalities.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and further in view of Horvitz et al (US Pat. 6,601,012).

Turetzky does not teach a PDA having an accelerometer.

However, Horvitz teaches that a PDA having an accelerometer (see Horvitz, col. 10, lines 40-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al., Hakala et al., and Horvitz et al in order to provide a portable map having an accelerometer capable of indicating the current location of the user.

7. Claims 9, 13-16, and 23-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and in view of DeLorme et al (US Pat. 6,321,158).

A. As per claims 9 and 34, Turetzky does not expressly disclose that the PDA performing a route calculation (see Turetzky, "A cellular telephone or other mobile device can display, either visually or otherwise, the user's location, the user's location on a map, a route or part of a route between the user's location and the desired destination, or any number of things that can be used for location services.").

However, DeLorme also teaches it in abstract.

Therefore, it would have been obvious to one of ordinary skill in the art to combine Turetzky et al , Hakala et al., and DeLorme et al in order to provide a portable map/a PDA with route calculating capabilities for conveniences of using a device with many different functionalities.

B. As per claims 13 and 14, Turetzky does not teach waypoints, planned route or points of interest.

However, DeLorme suggests a device with those functions in column 10.

C. As per claims 15, 23, 26, 30-33, 35 and 36, Turetzky teaches:

- providing a first handheld navigation device, the first navigation device and an integral display (see Turetzky, col. 4, lines 59-67);
- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning components (see Turetzky, col. 4, lines 59-64 and col. 3, lines 25-27);
- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted (see Turetzky, col. 3, lines 38-42).

Turetzky does not mention the use of triangulation.

However, Hakala et al. use that function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicant's disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines 18-22). Further it is obvious that the PDA used by the prior art has a display device. Turetzky does teach including the navigation data including cartographic data including a number of locations and data indicative of thoroughfares of a plurality of types.

DeLorme also teaches that limitation in column 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

D. As per claim 16, Turetzky does teach both devices to communicate with one another.

However, DeLorme teaches it in column 8, lines 60-64.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

E. As per claim 24, it would have been obvious to one of ordinary skill in the art to use a rate gyro or accelerometer in a navigation system in order to be more accurate (applicant's disclosure -page 10, lines 8-13).

F. As per claim 25, it would have been obvious to one of ordinary skill in the art to have at least a dead reckoning including at least an odometer, a speedometer, a differential wheel sensor and a compass in order to work properly (applicant's disclosure -page 3, lines 8-22).

G. As per claim 27, Turetzky does not teach the PDA performing a route calculation. However, DeLorme teaches it in abstract. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide a portable map viewing capable of indicating the current location of the user.

H. As per claim 28, Turetzky teaches providing a handheld multifunction-device selected from a group of a PDA enabled device and a cell phone enabled device (see Turetzky et al., col. 4, lines 59-67).

I. As per claim 29, it obvious to one skill in the art to use the PDA to communicate wirelessly to any other device in order to provide flexibility to the user.

8. As per claims 37, and 19:

The current examiner respectfully withdraw the allowance subject matter of claims 37-40 (given by the prior examiner) with the above reason for “includes a cradle for a device”, and using “software” for these 2 devices (software/firmware already embedded/programmed in those devices’ ICs).

A. Per claims 19, and 37: Claims 19, 37 contain those extra well-known features suggested by prior art (what claim of using a 2nd device is merely a dead-reckoning device; please note that “including a cradle” does not change/effect anything to the claimed steps of a method claim 37.

B. Per claims 20, and 38: Claims 20, 38 are merely suggested a selection of 2 available devices to have a better position data. This claim only requires to recognize/determine which device to use from the two: a dead reckoning device, and a triangulation positioning device. A very well-known step of YES or NO is required for this claim.

C. Per claims 21, and 39: Claims 21, 39 are merely confirmed what happens in claim 37; as best interpreted, it is a duplication of its parent claim (claim 37). In another word, this claim merely requires the use of a triangulation positioning device, and a dead reckoning device (producing dead reckoning data).

D. Per claims 22, and 40: Claims 22, 40 are merely required further limitations of “tracking a device’s location” (e.g., current location of a vehicle), and “providing visual and audio route guidance”; these limitations are very fundamental in the vehicle navigation field.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), further in view of Smith et al. (US Pat. 6,374,179).

The rationales and references for a rejection of claim 10 are incorporated.

The applicants further claim that using one of the triangulation positioning and dead reckoning positioning functionalities to check/adjust/calibrate (see Webster’s II New College Dictionary for a definition of calibration) the other one of the triangulation positioning and dead reckoning positioning functionalities.

Turetzky et al. disclose: *"Such a check block can have one characteristic of the signal checked, can have multiple characteristics to check, or can select from one or more characteristics to be checked, either automatically or manually selected, depending on the design or desires of the user."*; this check is a signal check for cross/auto-correlation between devices.

Turetzky et al. do not disclose that 2 claimed devices can calibrate each other.

However, Smith et al. discloses in Detailed Description Text (para. 39) that: *"As shown in FIG. 7, when an application 212 is brought on-line or made active, it registers with position service module 202 by sending request position session module signal 302 to position service module 202. In effect, application 212 is requesting composite of position data 240 from position service module 202. In request position session module signal 302, application 212 can include position data criteria (i.e. "special needs"), for example, application specified frequency of updating of position data, application specified accuracy of position data, type of position data, one or more components of composite of position data, resolution of composite of position data, position data from one or more particular navigational position sources 208, and the like."* This disclosure suggests a calibration of a component by selecting another available component as standard.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al., Hakala et al., and Smith et al. using one of the triangulation positioning and dead reckoning positioning functionalities to adjust the other one of the triangulation positioning and dead reckoning positioning functionalities for the advantage of using available and well-known technologies to supplement each other

(triangulation positioning and dead reckoning technologies) to always have a good backup device.

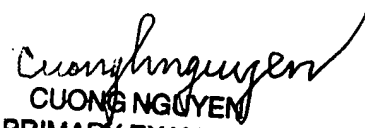
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose tel. number is 571-272-6759. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.


CUONG NGUYEN
PRIMARY EXAMINER